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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,646

11/21/2006

Hiroaki Mizushima

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7590

10/28/2009

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EXAMINER

CHAPEL, DEREK S

ART UNIT

PAPER NUMBER

2872

NOTIFICATION DATE

DELIVERY MODE

10/28/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,646	<b>Applicant(s)</b> MIZUSHIMA ET AL.	
	<b>Examiner</b> DEREK S. CHAPEL	<b>Art Unit</b> 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status Of Claims***

1. This Office Action is in response to an amendment received 10/8/2009 in which Applicant lists claims 2, 4-9 and 11 as being original and claims 1, 3, 10 and 12 as being currently amended. It is interpreted by the examiner that claims 1-12 are pending.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/8/2009 has been entered.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
6. Claims 1, 2, 4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich) in view of Nakane et al., U.S. Patent Number 5,374,972, of record (hereafter Nakane).
7. As to claims 1, 4 and 10, Racich discloses a method and apparatus for producing a polarizing film (see at least figure 1 and the abstract), comprising:
  - playing out a film from a roll of raw film (see at least figure 1, elements 10 and 66);
  - dyeing the film (see at least figure 1, element 20 as well as column 2, lines 50-68);
  - stretching the film (see at least column 3, line 53 through column 4, line 13),

wherein the film is vertically aligned and dipped into at least one type of processing liquid (see at least figure 1 where the film goes from a horizontal alignment to a substantially vertical alignment while passing into the processing tank '20').

Racich does not specifically disclose a plurality of films that are dipped simultaneously into the at least one processing liquid without contacting each other.

However, Nakane teaches that it is known to simultaneously process a plurality of films, which are vertically aligned (see at least figure 2 of Nakane where the films go from a horizontal alignment to a substantially vertical alignment while passing into the processing bath '40'), through at least one processing liquid without the films contacting each other (see at least figure 2, elements P1, P2, 40, 50 and 60 of Nakane).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Racich to include the teachings of Nakane so that a plurality of films, which are vertically aligned, are played out from a plurality of rolls and are dipped simultaneously into at least one processing liquid without contacting each other, for the purpose of conserving processing time and liquids by processing multiple films simultaneously.

8. As to claims 2 and 11, Racich in view of Nakane discloses that the number of films is 2 to 4 (see at least figure 2 of Nakane).

9. As to claim 12, Racich in view of Nakane discloses a total stretch ratio from 3.0 to 7.0 in the stretching (see at least column 4, lines 8-11 of Racich).

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10. Claims 3, 5, 6, 7, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Racich et al., U.S. Patent Number 4,591,512, of record (hereafter Racich) in view of Nakane et al., U.S. Patent Number 5,374,972, of record (hereafter Nakane) as applied to claims 1, 2, 4 and 10-12 above, and further in view of Kondo et al., U.S. Patent Application Publication Number 2002/0182427 A1, of record (hereafter Kondo).

11. As to claim 3, Racich in view of Nakane discloses that the films are polyvinylalcohol (PVA) dichroic films (see at least the abstract of Racich) which is dyed (see at least figure 1, element 20 as well as column 2, lines 50-68 of Racich) and then uniaxially stretched in the stretching step (see at least column 3, line 53 through column 4, line 13 of Racich).

Racich in view of Nakane does not specifically disclose that the polyvinylalcohol film is processed in a processing liquid containing a dichroic substance.

However, Kondo teaches a PVA polarizing film that is dyed with a dichroic dyestuff (see at least paragraphs [0007], [0013] and [0027] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the dyeing step of Racich in view of Nakane to include the teachings of Kondo so that the PVA film is dyed with a dichroic substance in the dyeing step, for the purpose of increasing the dichroic effects of the PVA film.

12. As to claims 5, 6, 7, 8 and 9, Racich in view of Nakane does not specifically disclose that an optical layer is provided on at least one side of the polarizing film or that the polarizing film is used in a liquid crystal panel or image display.

However, Kondo teaches a PVA polarizing film for use with a liquid crystal display (see at least paragraphs [0004], [0007] and [0014] of Kondo).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the polarizing film of Racich in view of Nakane to include the teachings of Kondo so that an optical layer is provided somewhere on at least one side of the polarizing film for the purpose of using the polarizing film in a liquid crystal panel or image display to improve contrast and polarize light viewed by the user.

It is noted that in claims 8 and 9, the limitations “produced by an in-house production method” are process limitations in a product claim (i.e. product by process) and are therefore not given any significant patentable weight as per MPEP 2113:

*“Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”*

### ***Response to Arguments***

13. Applicant's arguments filed 10/8/2009 have been fully considered but they are not persuasive.

14. Applicant's argument that Racich and Nakane do not disclose the films being vertically aligned is not persuasive. As mentioned in the rejections above, the films have a vertical alignment while entering the processing baths in Racich and Nakane. The claims are not limited to rolls of films that are stacked on top of one another, where

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separate rollers are used for processing each roll of film, or that the films are stacked one on top of the other without touching throughout processing.

***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S. C./  
Examiner, Art Unit 2872  
10/16/2009

/Stephone B. Allen/  
Supervisory Patent Examiner  
Art Unit 2872